AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1-44. (cancelled).

45. (currently amended) A prefilled syringe intended for the parenteral injection of a semi-solid formulation, comprising:

A longitudinally continuous hollow element forming a reservoir, prefilled with a semi-solid preparation to be injected between a piston having a convex tip and a base of a needle which comes into direct contact with one end face of said hollow element, so that the piston comes into direct contact with said base for the purpose of injecting the dose contained in said reservoir,

said hollow element and said needle being held fastened to each other at said base, by a casing which houses said reservoir, and providing mechanical resistance of the syringe,

wherein said casing forms a peripheral shell surrounding an external surface of said reservoir with substantially zero clearance, and

wherein said casing axially forces said hollow element directly against said base and strengthens said hollow element

against radial pressures generated by said axial forces and generated by the ejection of said semi-solid formulation.

46. (previously presented): The syringe as claimed in claim 45, prefilled with a dose to be entirely delivered.

47. (previously presented): The syringe as claimed in claim 45, wherein the base is introduced into one end of the reservoir.

48. (cancelled).

49. (previously presented): The syringe as claimed in claim 45, wherein the reservoir is cylindrical and introduced and locked inside a hollow body consisting of said casing, which provides the protection and the mechanical resistance of said syringe.

50. (previously presented): The syringe as claimed in claim 49, wherein said cylindrical reservoir is a straight hollow tube having constant internal and external diameters.

51. (previously presented): The syringe as claimed in claim 50, wherein the internal diameter of the reservoir is close to or even equal to that of the internal bore of the needle which extends the reservoir.

52. (previously presented): The syringe as claimed in claim 45, wherein a uniform conical or funnel-shaped narrowing is provided toward an end of the reservoir which houses the needle.

53. (previously presented): The syringe as claimed in claim 45, wherein an internal diameter of the needle is between 0.2 and 1.5 mm and an internal diameter of the reservoir, and therefore the diameter of the piston of the syringe, is between 0.2 and 5 mm.

54. (previously presented): The syringe as claimed in claim 53, wherein a stroke of the piston has a maximum length of 7 cm in order to inject volumes of from 1 µl up to 1 ml.

55. (previously presented): The syringe as claimed in claim 53, wherein an external diameter of the reservoir is standardized to 6 mm, thereby allowing the aforementioned various internal diameters to be provided.

56. (withdrawn): The syringe with a tubular reservoir as claimed in claim 50, wherein the reservoir consists of two tubes, one placed in the other, so as to increase the resistance to internal pressure.

57. (previously presented): The syringe with a tubular reservoir as claimed in claim 50, wherein the tubular reservoir consists of two or more tubes, one placed behind the other, which are held in this position by the casing, for facilitating the formation of syringes allowing the administration of different volumes.

58. (withdrawn): The syringe as claimed in claim 45, wherein the casing consists of two elements, one of which forms a hollow body into which the reservoir is introduced and the other

of which contains the hollow body and traps the reservoir, said other element leaving an opening for passage of a piston rod and said one element leaving an opening for passage of the needle.

59. (withdrawn): The syringe as claimed in claim 58, wherein the opening in said other element forms a guide for a piston rod having a diameter approximately equal to the internal diameter of the reservoir.

60. (withdrawn): The syringe as claimed in claim 59, wherein the other element includes gripping means or finger rests.

61. (withdrawn): The syringe as claimed in claim 57, wherein means are arranged, on one of said first and second elements, so as to gear down the injection force or to replace the manual force with a means of mechanical or driving assistance.

62. (withdrawn): The syringe as claimed in claim 61, wherein the opening in said other element is threaded in order to engage with a thread on the piston rod so as to allow helical movement of said rod.

63. (withdrawn): The syringe as claimed in claim 61, wherein said other element has a peripheral thread onto which an internally threaded bush having a central piston rod is screwed.

64. (withdrawn): The syringe as claimed in claim 45, wherein said reservoir and said needle are assembled, at said needle base, without any bonding, clip-fastening or any other

positive assembly means, ensuring assembly, and resistance to the forces tending to disassemble components of the reservoir, by means of said casing, said casing being designed to prevent axial separation of the reservoir away from the needle.

65. (withdrawn): The syringe as claimed in claim 45, wherein the piston, which is fastened to a piston rod, has a shape which makes it possible to minimize the resistance to flow and which matches the base of the needle or that end of the reservoir on the same side as the needle so as to leave as small an unused volume as possible when the piston reaches an end-of-injection position.

66. (withdrawn): The syringe as claimed in claim 45, forming part of a set of syringes having a constant diameter and a constant length of the reservoir tube, making it possible to use the same casing for reservoirs provided for an entire range of formulation doses.

67. (withdrawn): The syringe as claimed in claim 45, wherein the base of the needle and the piston are made of the same material.

68. (withdrawn): The syringe as claimed in claim 45, wherein, in order to avoid the risk of injection into a vessel, the syringe includes means which make it possible to check whether any blood has been withdrawn from a vessel, this being achieved without having to pull on the piston.

69. (withdrawn): The syringe as claimed in claim 68, wherein said means is a catheter needle allowing blood to be withdrawn by the capillary effect as far as a region open to the outside.

70. (withdrawn): The syringe as claimed in claim 45, further comprising a passage, comprising a region visible by the operator, which communicates with the internal bore of the needle and allows, by one of pressure, capillary effect and vacuum, blood to be seen should the needle have penetrated a vascular lumen.

71. (withdrawn): The syringe as claimed in claim 70, wherein, should blood be removed by capillary effect, provision is made for the internal bore of the needle to communicate with the external atmosphere via a path providing a pressure drop such that a flow of air is allowed, while the flow of blood is limited, but that any substantial flow of the semi-solid formulation is unable to take place.

72. (withdrawn): The syringe as claimed in claim 45, wherein a passage for the blood from the needle passes via the reservoir and includes an elongate pressure-drop path.

73. (withdrawn): The syringe as claimed in claim 72, wherein said elongate path is between a thread or groove on the base of the needle and a complementary surface in the transparent wall of the reservoir, or vice versa, this thread communicating

at an end, directly or through a display region, with the external atmosphere via a small-diameter hole.

74. (withdrawn): The syringe as claimed in claim 70, wherein the inside of the needle and of the reservoir is maintained under vacuum so that a withdrawal of blood will, by pressure difference, emerge in a display region.

75. (withdrawn): The syringe as claimed in claim 74, further comprising a display region not communicating with the atmosphere.

76. (withdrawn): The syringe as claimed in claim 45, wherein the needle is covered by a cap, a package or other flexible protection element which isolates the needle from the outside and which will be transpierced by the needle at the moment of injection, this cap, package or protection element being one of retractable, deformable and foldable in order to move away during penetration of the needle and to permit penetration of all or most of the length of the needle.

77. (withdrawn): The syringe as claimed in claim 76, wherein an inside of the syringe is under vacuum.

78. (withdrawn): The syringe as claimed in claim 76, wherein said package consists of a tube or a sachet made of plastic, sealed around or onto the needle.

79. (withdrawn): The syringe as claimed in claim 78, wherein said package, which completely isolates the needle from the outside is sealed at the end of the needle so as to

completely close off the end of the needle in the manner of a plug.

80. (withdrawn): The syringe as claimed in claim 76, in which any withdrawal of blood, being withdrawn by capillary effect, may be seen, wherein the hole connecting the pressure-drop passage to the external environment emerges, in fact, inside this package so that no communication actually exists between a non-sterile atmosphere and the inside of the needle.

81. (withdrawn): The syringe as claimed in claim 76, wherein said cap, package or protection element is fixed to a front end of the reservoir.

82. (withdrawn): The syringe as claimed in claim 45, wherein the prefilling is such that the volume of the formulation occupies the entire space between the piston and the needle without it being necessary to purge the syringe before injection.

83. (withdrawn): The syringe as claimed in claim 45, wherein the piston is not fastened to the piston rod and is pushed back by the piston rod in the injection direction.

84. (withdrawn): The syringe as claimed in claim 45, wherein a seal is interposed between the reservoir and the casing in order to prevent any communication with an interstice located between the reservoir and the casing.

85. (withdrawn): A process for filling a syringe as claimed in claim 45, wherein a filling nozzle is connected to said tube or reservoir, plugged by said piston or by a septum,

and in which said piston is displaced by the filling of the formulation, said tube then being plugged by said base of the needle.

86. (withdrawn): The filling process as claimed in claim 85, wherein said tube is packaged beforehand in a package and in which it is plugged by introducing it into the hollow body of said casing containing the needle and carrying the cap, all of this being inside a second package.

87. (previously presented: The syringe as claimed in claim 45, wherein said casing directly contacts said external surface of said reservoir.

88. (previously presented): The syringe as claimed in claim 45, wherein an entirety of said external surface of said reservoir contacts an internal surface of said reservoir.

89. (currently amended) A syringe for the parenteral injection of a semi-solid formulation, comprising:

a hollow reservoir having a continuous longitudinal external surface, prefilled with a semi-solid preparation to be injected;

a piston having a convex tip for pressing against the semi-solid preparation to be injected;

a needle opening to said reservoir; and

a housing surrounding an entirety of said reservoir,

wherein an internal surface of said housing directly contacts said external surface of said reservoir along an entirety of said external surface, and

wherein said needle is fixedly engaged directly between an end face of said reservoir and said housing.

90. (new) The syringe as claimed in claim 45, wherein the piston comes into direct contact with said base for the purpose of injecting the dose contained in said reservoir, so that no volume of injectable matter remains in the reservoir after the injection.